

WE CLAIM:

1. A motorized door latch assembly for locking an oven door in a closed position so as to close an oven cavity for purposes of cleaning said oven cavity, said oven door being mounted on a range body and being movable between an open and said closed position, said door latch assembly comprising:
- 5 a mounting plate supported by said range body above said oven cavity,
a driver,
a latch rod secured to said driver at a first end and secured to a latch plate at a second end,
said latch plate being adapted to engage said oven door and being
- 10 movable between a first position in which said oven door may be opened and a second position in which said oven door may not be opened, and
a fixer fixing said latch plate in said first position until said driver is activated, wherein said latch rod translates, moving said latch plate between said first and second positions.

2. The motorized door latch assembly of claim 1 wherein said mounting plate has a guide therethrough and a pin extending upwardly from said mounting plate.
3. The motorized door latch assembly of claim 1 wherein said driver is a motor supported by said mounting plate and a cam rotatably driven by said motor.
4. The motorized door latch assembly of claim 2 wherein said second end of said latch plate passes through said guide.
5. The motorized door latch assembly of claim 2 wherein said pin extends through a slot in said latch plate to restrict movement of said latch plate.
6. The motorized door latch assembly of claim 1 further comprising a biaser extending between a fixed point on said mounting plate and said latch plate so as to bias said latch plate toward said second position.
7. The motorized door latch assembly of claim 1 wherein said fixer is a fastener.
8. The motorized door latch assembly of claim 1 wherein said fixer is an L-shaped bracket.
9. The motorized door latch assembly of claim 1 wherein said fixer is a spring clip.

10. The motorized door latch assembly of claim 1 wherein said latch plate is movable to a third position upon further translation of said latch rod.

11. The motorized door latch assembly of claim 1 wherein said latch plate has a hole therethrough, said second end of said latch rod passing through said hole of said latch plate to secure said second end of said latch rod to said latch plate.

12. The motorized door latch assembly of claim 1 wherein said latch rod extends generally from back to front of said range.

13. A motorized door latch assembly for locking an oven door in a closed position so as to close an oven cavity for purposes of cleaning said oven cavity, said oven door being mounted on a range body, said door latch assembly comprising:
- 5 a first mounting plate supported by said range body above said oven cavity,
- a pin extending upwardly from said first mounting plate,
- a motor assembly supported a second mounting plate, said motor assembly including a motor and a cam rotatably driven by said motor,
- 10 a latch rod secured to said cam at one end and secured to a latch plate at the other end, said latch plate having a hook at one end for engaging said oven door,
- a temporary length member extending between said first and second mounting plates, and
- wherein upon rotation of said cam by said motor, said latch rod translates, moving said latch plate between three positions, a first position in which said oven door may be opened, a second position in which said oven door may not be opened and a third position in which said oven door is locked and sealed.
- 15
14. The motorized door latch assembly of claim 13 wherein said first mounting plate is located in the front of said range.
15. The motorized door latch assembly of claim 13 wherein said second mounting plate is located in the rear of said range.
16. The motorized door latch assembly of claim 13 wherein said second mounting plate is adjustably secured to said range body.

17. A motorized door latch assembly for locking an oven door in a closed position so as to close an oven cavity for purposes of cleaning said oven cavity, said oven door being mounted on a range body, said door latch assembly comprising:

5 a first mounting plate supported by said range body above said oven cavity,

a driver supported by a second mounting plate, said second mounting plate being adjustably secured to said range body,

10 a latch rod secured to said driver at one end and secured to a latch plate at the other end, said latch plate having a hook at one end for engaging said oven door, and

wherein upon activation of said driver, said latch rod translates, moving said latch plate between three positions, a first position in which said oven door may be opened, a second position in which said oven door may not be opened and a third position in which said oven door is locked and sealed.